



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

June 19, 2008

MEMORANDUM

SUBJECT: Effects Determinations for Oryzalin Relative to the California Red-Legged Frog and Designated Critical Habitat

FROM: Ed Odenkirchen, Senior Scientist *Ed Odenkirchen*
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TO: Arthur-Jean B. Williams, Associate Director
Environmental Fate and Effects Division

Attached is the assessment of potential direct and indirect effects to the California red-legged frog (CRLF) and potential modification to designated critical habitat from uses of the herbicide oryzalin. While the Endangered Species Act requires we assess uses of pesticides relative to any potentially affected listed species, this assessment focuses only on the CRLF, including designated critical habitat, addressing provisions of a settlement agreement entered into by the federal government to resolve claims made by plaintiffs against EPA in a court case (CBD v. EPA¹).

The attached assessment was conducted consistent with the Agency's Overview Document². Effects determinations for this assessment are summarized below:

- Oryzalin is likely to adversely affect (LAA) the aquatic-phase CRLF based on indirect effects related to reduction in algae as food items for the tadpole and non-vascular plants and sensitive herbaceous terrestrial plants that comprise its habitat.
- Oryzalin is likely to adversely affect (LAA) the terrestrial-phase CRLF based on chronic direct effects and indirect effects related to a reduction in mammals and terrestrial-phase frogs as food items, and herbaceous terrestrial plants as habitat.
- Based on the above effects, modification to critical habitat is also expected for both the aquatic and terrestrial phase CRLF.
- The above effects are likely to occur only for those occupied core habitat areas, California Natural Diversity Database (CNDDB) occurrence sections, and designated critical habitat for the CRLF that are located within 164 feet from use sites where oryzalin is applied.

¹ Settlement agreement of October 20, 2006: Center for Biological Diversity v. United States Environmental Protection Agency. Civ. No: 02-1580-JSW(JL)).

² Overview of the Ecological Risk Assessment: Process in the Office of Pesticide Programs, U.S. Environmental Protection Agency: Endangered and Threatened Species Effects Determinations: January 23, 2004.

As required by the Alternative Consultation Agreement EPA entered into with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (Services), I have been trained by the Services to make such determinations. Additionally, this assessment was subjected to internal Agency peer review throughout its development. The review panel included Stephanie Irene, Mohammed Ruhman, Michael Barrett, and Holly Galavotti.

Please let me know if you have any questions regarding this assessment and effects determination for oryzalin relative to the CRLF and its designated critical habitat.

cc: Don Brady
Debbie Edwards

Attachments